

## REMARKS

As a preliminary matter, Applicant again respectfully requests that the Examiner correct his characterization of Applicant's response to the previously Restriction Requirement. The Examiner has again stated, in the outstanding Office Action, that Applicant's election "was made without traverse in the reply filed on 12/02/2004." As Applicant pointed out in Amendment B (Substitute Amendment filed September 15, 2005), this statement by the Examiner is entirely incorrect. Applicant did specifically traverse the Restriction Requirement, and on the grounds that the examination of two additional claims, out of the total 14 claims, would not place an undue burden upon the Examiner.

The Examiner is entitled to disagree with Applicant's grounds for traversal, and may make the Restriction Requirement final based upon his disagreement. The Examiner is not entitled, however, to mischaracterize Applicant's grounds of traversal as being "made without traverse." The lack of an undue, or serious, burden upon the Examiner in examining all of the claims together is an entirely valid grounds for traversing a Restriction Requirement, and the Examiner's disagreement with the basis for traversal does not negate the fact that the traversal was made.

The Examiner has the burden to establish that the examination of two additional claims will not merely impose *any* burden upon him, but that the examination of these two additional claims will impose a serious burden. Both of claims 7 and 8 are relatively short in length, and the additional consideration of these claims would represent a

small fraction of the entire burden necessary to examine all 14 claims together. The Examiner must correct his erroneous characterization that Applicant's election of the remaining 12 claims was made "without traverse." It was not.

As a second preliminary matter, Applicant traverses the Office Action as being nonresponsive. Section 707.7(f) of the MPEP places a burden upon the Examiner to, when repeating a previous rejection, first answer all of the meritorious arguments made by Applicant traversing the previous rejection. In the present case, however, the Examiner has not done so with respect to claims 1-5 at least. The outstanding Section 103 rejection differs only from the previous Section 102 rejection in that the new rejection adds the Furuishi reference (JP 2000-306226) in an obviousness combination with the previously cited (under Section 102) Higashiya reference (JP 06-012807). The Examiner, however, does not cite Furuishi for teaching or suggesting the features of the present invention that Applicant has previously demonstrated are lacking from the Higashiya reference. The Examiner still relies upon Higashiya for teaching these same features, and should not avoid his burden to answer the meritorious arguments against this reference by merely adding another reference that is not relevant to these features. Accordingly, Applicant submits that the outstanding Office Action should be vacated, and full consideration given to all of the previous meritorious arguments.

Claims 1-6 and 9-14 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Furuishi in view of Higashiya. With respect to claims 1-5, Applicant respectfully traverses this rejection for at least the reasons of record. The Examiner has not established a *prima facie* case of obviousness against these claims, nor has the Examiner given full consideration to all of the recited language of claim 1 in particular.

The Examiner admits, on page 3 of the outstanding Office Action, that Furuishi is silent regarding the cavity of the present invention, which is recited to be located on the air outlet end of the head slider near the electromagnetic transducer between the transducer and a rearmost portion of the head slider. The Examiner relies only upon the Higashiya reference for somehow teaching or suggesting such features, but the Examiner does not actually assert how Higashiya teaches all of these features. The Examiner only asserts that Higashiya shows a recess 1 on the air outlet end “near the electromagnetic transducer.” The Examiner does not assert, however, that Higashiya also teaches or suggests that this recess 1 can be, or is, located between the transducer and the rearmost portion of the head slider. In fact, and as previously argued, Higashiya shows nothing of the sort.

It is significant to note for the record that the Higashiya reference is entirely silent regarding the placement of any transducer within the disclosed structure. Accordingly, no reasonable interpretation of the reference would find a teaching or suggestion that any of Higashiya’s disclosed recesses 1 would be located between the transducer and the rearmost end 13 of Higashiya’s slider 10. According to the structure shown in Fig. 2 of the Furuishi

reference, the transducer 35 would have to be located significantly nearer to the rearmost end of the slider than any of Higashiya's recesses 1 are shown to be. Accordingly, the rejection of claim 1 (as well as its dependent claims) is deficient on its face, and should be withdrawn.

With respect to claims 2 and 3 specifically, Applicants also separately traverse this rejection for at least the reasons of record. Claims 2 and 3 of the present invention both feature that the z-dimension of the present cavity is equal to a function of the x-dimension multiplied by a function of the y-dimension. In other words, the depth of the present cavity is directly dependent on the respective length and width dimensions of the cavity at any given point. This dependency is clearly explained and illustrated in the present Specification, and not taught or suggested by the prior art. The assertion by the Examiner, however, that the depth of Higashiya's recess is somehow dependent on the longitudinal and transverse positions of the recess is entirely without support from the reference itself. Higashiya only teaches that the depth of the recess can be between 10 and 50 $\mu$ m. Higashiya never teaches or suggests that this variable recess depth can also be interpreted to mean that the variability is dependent on the x- and y-directions of recess. This leap of logic is not based upon any teaching or suggestion from Higashiya.

The depth range disclosed by Higashiya appears to be nothing more than a statement by the inventor relating to the measurement range in which the inventor considers his device to be useful. There is no teaching or suggestion within the reference that the depth of any one recess will vary *across that particular recess*. In fact, paragraph [0011] teaches

the opposite. In this portion of text, Higashiya teaches one consistent depth only for all six described circular minute crevices 1 across the rail of the slider, even though accompanying Fig. 1 of the reference shows that the x- and y- dimensions of the recesses vary across the rails. Accordingly, the rejection of claims 2 and 3 in particular is also deficient on its face, and should be withdrawn.

With respect to claims 4 and 5, Applicant also traverses the rejection of these claims specifically for at least the reasons of record as well. The Examiner does not appear to have given any consideration to the amendments to these claims made in Amendment B. Claims 4 and 5 were rewritten in Amendment B to more clearly emphasize only the structural features of the invention, and not process limitations, which are now incorrectly referenced by the Examiner. For example, the Examiner still refers to claim language relating to “removing a portion of the head slider.” The Examiner should have noted that this particular language was removed from both claims 4 and 5 in Amendment B. Applicant again respectfully requests that the Examiner give full consideration to the amendments and arguments made in Amendment B, and withdraw the rejection.

With respect to claims 6 and 9-14, Applicant traverses the rejection because the Examiner does not even assert what features of the cited prior art references he deems to be relevant to the recited features of the present invention. It is equally important to note that the Examiner has not provided a sufficient rationale for combining the two cited references as proposed. The Examiner asserts that Higashiya provides the motivation for the

combination by teaching that its recess may catch “dust entering between the magnetic head slider and magnetic disk.” This stated rationale, however, does not actually address all of the recited features of the present invention.

According to the Examiner, Higashiya only teaches to provide a recess somewhere on a head slider to “catch dust.” Nothing in Higashiya’s Abstract, however, teaches or suggests *where* to locate the recess, or more particularly, to locate the recess on the air outlet end of the slider. As previously discussed, Higashiya at most only teaches to locate its recess *near* the air outlet end of the slider, but not on the air outlet end. The Examiner is required to interpret the present claims according to the present Specification. One of ordinary skill in the art would clearly understand that the cavity of the present invention is actually located on the very end of the head slider in the air outlet direction, and not merely *near* the end, as shown by Higashiya for its different recesses.

The proposed combination is further deficient because the Examiner has not explained how the two different references could even be combined. Claims 6 and 14 in particular recite a front rail in combination with a pair of rear rails on a head slider, as well as the respective locations of a transducer and a cavity near the transducer on the rear rails. Higashiya, however, does not teach or suggest either of a front rail and the location of a transducer on the slider. The structural configuration shown by Furuishi is so significantly different than that shown by Higashiya that there could be no obvious motivation for one of

ordinary skill in the art to try to combine Higashiya's circular recesses along the side rails shown by Furuishi.

Furuishi already shows that the side rails 45, 46 are significantly recessed from the floating surface 21, and therefore there would be no benefit to adding Higashiya's circular recesses to Furuishi's side rails. Furuishi's rear rails 36, 37 are also both shown to already contain significant recessed portions 38, 41 respectively, which the Examiner acknowledges are not analogous to the recited cavity of the present invention. There would be no obvious motivation for one of ordinary skill in the art to add yet another recess to Furuishi's rear rails either.

The proposed combination is still further deficient because Furuishi illustrates a location to its transducer 35 that would render the proposed combination with Higashiya even more irrelevant to the present invention. If the Examiner were to attempt to locate Furuishi's transducer at a similar location on Higashiya's slider, the Examiner will clearly find that none of Higashiya's recesses 1 would be located between the transducer and the air outlet end of the slider. There would therefore be no obvious advantage achieved from combining the two references as proposed by the Examiner. The advantages achieved by the present invention would be lacking from the Examiner's proposed combination.

These advantages, as achieved by the present invention, render the proposed combination even that much further nonobvious. Higashiya clearly teaches that its disclosed recesses 1 are meant to exist along the air bearing surfaces of its side rails 12 during

operation of the device. Accordingly, Higashiya's recesses 1 are very much the opposite of the recited cavity of the present invention. The cavity of the present invention represents the amount of material necessary to remove from the head slider, near the transducer, that would otherwise project out from the end near the transducer when a predetermined voltage is applied to the slider. In other words, when the present head slider is in operation with a predetermined voltage being applied to it, the cavity could effectively disappear, only to reappear when the voltage is no longer applied. Accordingly, the present cavity could not "catch dust" during operation, as asserted by the Examiner, because of the effective "disappearance" of the present cavity during operation. The Examiner has cited to no teaching or suggestion within either reference that even recognizes this problem, let alone solves it, as in the present invention. Accordingly, for at least these additional reasons, the proposed obviousness combination rejection should be withdrawn.

Nevertheless, in the interest of expediting prosecution, in spite of the deficiencies in the rejections noted above, Applicants have amended claims 6, 9, and 12-14 further herein. Specifically, independent claims 6 and 14, similarly to claim 1, further clarify that the location of the cavity is along the rearmost portion of the head slider, namely, that a portion of the cavity is exposed along a rear face of the head slider on the air outlet end. Claim 9, on the other hand, has been amended to recite the same features of claim 1 that are discussed above, namely, that the cavity is located between the transducer and a rearmost portion of the head slider. Additionally, claims 12 and 13 have been amended similarly to

how claims 4 and 5 were amended previously, namely, to emphasize only the structural features of the claims already present in the recited language.

For all of the foregoing reasons, Applicant submits that this Application, including claims 1-14, is in condition for allowance, which is respectfully requested. The Examiner is invited to contact the undersigned attorney if a further interview would expedite prosecution.

Respectfully submitted,

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